

REMARKS

A Petition for Revival of this unintentionally abandoned application is being filed concurrently with this amendment.

The specification has been amended to make editorial changes therein, bearing in mind the criticisms in the Official Action, to place the application in condition for allowance at the time of the next Official Action.

Claims 1-15 were rejected under §112, second paragraph, and have been replaced with new claims that are proper as to form. Note that all of the claims read on the embodiment of Figure 1 and on the embodiment of Figure 2. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 1-5 and 8-9 were rejected as unpatentable over DELANS 4,983,475 in view of GB 1 590 947 (GB '947), and the other claims were rejected in view of further references. Reconsideration and withdrawal of the rejections are respectfully requested.

DELANS is directed to a battery having a plurality of rectangular positive and negative plates, the positive plates being connected to one another by two plate straps arranged at diagonally opposed corners of the plates, the plate straps being themselves connected by a curved member (38 - see Fig 3). A similar arrangement is present for the negative plates.

As noted in the Official Action, DELANS does not disclose members which are parallel to the long edges of the plates as required by claim 16. However, it is not believed that rearranging the diagonal members to be parallel to the long plate edges would have been an obvious geometric alternative, for the following reasons.

It is clear from Figures 10A and 10B that the diagonal members of DELANS are intended to allow current to be drawn from diagonal corners of the plates. That arrangement is aimed at overcoming the problems associated with the prior art plates of Figures 1 and 2 where current has to travel across the plate to a single plate strap located on an upper corner of the plate. In the diagonal arrangement of DELANS, the furthest distance to be traveled across the plate is from the dead center of the plate to one of the corners fitted with a strap. However, in the arrangement of the present invention, wherein the member is connected to or adjacent to the same long edge of the plate, the maximum distance is longer (from the middle of the opposite long edge to the connection between plate and member). Accordingly, the skilled reader would not see the presently claimed arrangement as an obvious alternative to the diagonal member of DELANS.

Furthermore, the presently claimed arrangement has its own distinct advantages. The member extending parallel to the

long edge is shorter than the diagonal conducting bars of DELANS. That shorter length lowers the cost of the battery of the present invention by reducing the usage of conductive material and, more importantly, the shorter length reduces the electrical resistance of the member thus lowering internal resistance of the battery and improving its electrical characteristics. Those advantages are neither disclosed nor suggested in DELANS.

The allegation that to change the diagonal bars of DELANS to arrive at the present invention would involve only routine experimentation also fails to take account of the fact that the battery containers are usually shaped to fit the plate stack and so consequent changes in the shape of the container would likely be required. For example, in the arrangement shown in Figures 1 and 2 of the present application, the two ends of the plate stack are free of any projections or covering members and so it is straightforward to shape and size the battery container so as to press against each of the end plates over substantially the whole area of the plate, thereby keeping the plates of the plate stack in close alignment. In the battery of DELANS, however, the diagonal members run over the end plates of the plate stack, and so the same inward pressure from the container end walls could be achieved only by shaping those end walls to fit around those diagonal members. Discarding those diagonal members in favor of a member running down the side of

the plate stack, as shown in Figure 1 of the present application, would require a wider container with different end walls.

The skilled reader would also see that the embodiments shown in Figures 5, 6, 7, 8, 9 and 11 of DELANS would appear to be unworkable with an arrangement wherein the member extends parallel to the long edges of the plates for most of its length as required by present claim 16. Accordingly, the skilled reader would not regard such an arrangement as an obvious alternative to the diagonal members of DELANS.

The Official Action also fails to take account of the fact that DELANS specifically teaches (see column 4, lines 60 to 69 and column 5, lines 59 to 62) that plate growth caused by ageing adversely increases the length of the plates and proposes (column 9, lines 10 to 27) that the curved diagonal bars can straighten out to compensate for the plate growth. The skilled reader of DELANS would therefore understand that the particular curved diagonal arrangement of the members is desirable to compensate for plate growth and that undue modification of the members would be likely to give rise to problems caused by plate growth.

The other documents also fail to disclose or suggest a battery having a conducting member as required by claim 16 either alone or in combination with DELANS. Accordingly, the new claims are allowable over the art of record.

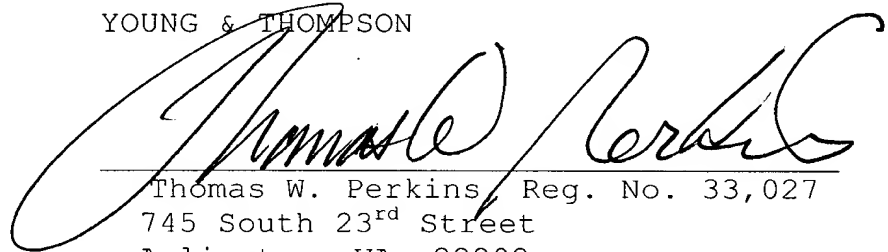
In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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OCT 29 2003

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